

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-14 are presently pending in this application, Claim 1 having been amended and Claims 9-14 having been added by the present amendment.

In the outstanding Office Action, Claims 1-8 were rejected under 35 U.S.C. 102(b) as being anticipated by Niori et al. (U.S. Patent 5,800,618).

The personal interview granted by Examiner Fuqua, on February 9, 2004, is hereby gratefully acknowledged. In the course of this interview, the essential aspects of Claim 1 were summarized and the Niori et al. reference was discussed. The Examiner indicated that she would reconsider and further search if necessary.

Amended Claim 1 and new Claims 9-14 are fully supported by the specification, drawings and claims as originally filed.¹ Applicants therefore submit that no new matter has been introduced.

Claim 1 has been amended to correct articles. Thus, this claim amendments are not believed to narrow the scopes of their respective original Claims.

Briefly recapitulating, Claim 1 is directed to a hot plate for a semiconductor producing/examining device. For example, referring to the non-limiting embodiment of Fig. 3, the hot plate 10 includes a resistance heating element 12 which is formed on a surface of a ceramic substrate 11. In another non-limiting embodiment of Fig. 4, a resistance heating element 22 is formed inside the ceramic substrate 21. Returning to Fig. 3, glossiness of a heating face (11a) of the ceramic substrate 11 is 1.5% or more. The glossiness is explained in

¹For example, Claim 9 is supported by Examples, Claim 10 is supported by the specification, page 4, lines 5-7, Claim 11 is supported by the specification, page 15, lines 10-11, Claim 12 is supported by the specification, page 11, lines 25-30, and Claim 13 is supported by Examples.

the specification, for example, at page 7, line 21 to page 8, line 14, and page 8, last line to page 9, line 3. Since the glossiness of a heating face of the ceramic substrate is 1.5% or more, an object to be heated such as a silicon wafer and the like can be evenly heated. The reason why a silicon wafer can be evenly heated is explained hereinafter.

As discussed in the specification, when a silicon wafer is placed to be heated having a space between the silicon wafer and the heating face of the ceramic substrate, the atmospheric gas flows as a laminar flow between the heating face and the silicon wafer because the glossiness of the heating face is 1.5% or more. Further, the distance between the silicon wafer and the heating face is substantially constant all over the heating face because the glossiness of the heating face is 1.5% or more. As a result, the silicon wafer can be evenly heated (see the present specification, page 6, line 25 to page 7, line 4).

When the silicon wafer is placed directly on the heating face to be heated, the silicon wafer contacts the heating face to realize a surface-contact because the glossiness of the heating face is 1.5% or more. Thus, the silicon wafer can be thus evenly heated (see the present specification, page 7, lines 5 to 9).

The effect of the present invention is clearly shown from the comparison between Examples 1 to 8 (except Example 5) and Comparative Examples 1 to 5 (except Comparative Example 3) in Table 1 on page 44 of the present specification. In the Examples wherein the glossiness is 2.8% to 165%, the temperature evenness property of a silicon wafer is 4°C to 5°C. In the Comparative Examples wherein the surface glossiness is 1.0% to 1.3%, the temperature evenness property of a silicon wafer is 8°C to 10°C.

The Office Action asserts that Niori et al. disclose that the glossiness of a heating face of the ceramic substrate is 1.5% or more. However, Niori et al. fail to disclose that the glossiness of a heating face of the ceramic substrate is 1.5% or more. Although the Office Action identifies a portion (the Niori et al. reference, col. 16, line 66 to col. 17, line 22) which

discloses the glossiness of a heating face of the ceramic substrate is 1.5% or more, there is no such description in that portion as the Examiner admitted during the interview.

Accordingly, Niori et al. are not believed in any way to anticipate the specific features recited in Claim 1. Therefore, Claim 1 is believed to be allowable.

Substantially the same arguments as set forth above with regard to Claim 1 also apply to dependent Claims 2-13, which depend directly or indirectly from Claim 1. Accordingly, each of the dependent claims is also believed to be allowable.

Claim 14 is directed to a hot plate. For example, referring to the non-limiting embodiment of Fig. 3, the hot plate 10 includes a ceramic substrate 11 and a resistance heating element 12 which is provided on the ceramic substrate 11. The ceramic substrate 11 has a heating face (11a) which is configured to face a silicon wafer 9. The heating face has a glossiness of at least 1.5%. In another non-limiting embodiment of Fig. 4, a resistance heating element 22 is formed inside the ceramic substrate 21.

Niori et al. fail to disclose that the heating face has a glossiness of at least 1.5%. Accordingly, Niori et al. are not believed in any way to anticipate the specific features recited in Claim 14. Therefore, Claim 14 is believed to be allowable.

Consequently, in view of the present amendment, it is respectfully submitted that this application is in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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